Effective Date: October 23, 1995

COORDINATED ISSUE
ALL INDUSTRIES
DOLLAR-VALUE LIFO
EARLIEST ACQUISITION METHOD

ISSUE

Whether a taxpayer, electing the earliest acquisition method of determining the current year cost of items making up a dollar-value LIFO pool, can determine the index used to value an increment without double-extending the actual cost of the goods purchased or produced during the year in the order of acquisition.

FACTS

Historically, most taxpayers maintain their inventory records using the cost of items most recently purchased. However, if they elect LIFO, they prefer to use the earliest acquisition method to determine their current-year cost without changing their record keeping system. Therefore, they compute their LIFO inventory value using a dual index method. One index (the deflator index) is used to convert current-year cost to base-year cost and a second index (the increment valuation index) is used to value the increment.

The deflator index measures inflation from the beginning of the taxable year for which the LIFO method was first adopted (i.e., the base date) to the current year. Taxpayers using the double-extension method or some variants of an index method calculate the index by comparing the cost of goods on hand at the end of the year with the cost of those goods at the base date. (Taxpayers using the double-extension method do not need the deflator index. They will, however, need an index to value any increments). For taxpayers using the link-chain method, an index is determined for the current year and that index is multiplied by the prior year's cumulative index to measure the inflation from the base year to the end of the current year. This is the deflator index and is used to compute the cost of the current inventory at base prices. If this cost is greater than the similar cost computed for the prior year, an increment occurs. The resulting increment, at base cost, is converted to current LIFO cost by applying an increment valuation index.

When computing the increment valuation index, many taxpayers fail to double-extend the end of year quantities in the order of acquisition, as required in Treas. Reg. Sec. 1.472-8(e)(2). Instead, they rely on various shortcut procedures to estimate the earliest acquisition index. Common among these procedures are the use of the prior year's cumulative index and the use of an inventory turn computation.

LAW

Section 472(a) of the Internal Revenue Code allows a taxpayer to elect the LIFO inventory method. The use of LIFO, however, must be in accordance with the regulations, must be applied on a consistent basis, and must clearly reflect income. In addition, inventories on LIFO must not be valued lower than cost.

Treas. Reg. Sec. 1.472-8 prescribes the operating rules for the use of the dollar-value method of pricing LIFO inventories. Section 1.472-8(e)(1) is the basic provision outlining the use of the double-extension, the index, and the link-chain methods of pricing LIFO inventories. Among other provisions, this section states that the appropriateness of the index and the accuracy, reliability, and suitability of the use of such index must be demonstrated to the satisfaction of the District Director in connection with the examination of the taxpayer's income tax returns.

Treas. Reg. Sec. 1.472-8(e)(2) prescribes the operating rules for the use of the double-extension method. It requires the extension of each item in the inventory at both base-year cost per unit and current-year cost per unit. Treas. Reg. Sec. 1.472-(8)(e)(2)(ii) provides that a taxpayer is allowed to determine the current-year cost of items making up the inventory by reference to:

(a) the actual cost of the goods most recently purchased or produced during the year;

(b) the actual cost of the goods purchased or produced during the year in the order of acquisition;

(c) the average cost of the goods purchased or produced during the year; or

(d) any other proper method which clearly reflects income.

Treas. Reg. Sec. 1.472-8(e)(2)(iv) states in part:

> To determine whether there is an increment or liquidation in a pool for a particular taxable year, the end of the year inventory of the pool expressed in terms of base-year cost is compared with the beginning of the year inventory of the pool expressed in terms of base-year cost. When the end of the year inventory of the pool is in excess of the beginning of the year inventory of the pool, an increment occurs in the pool for that year. If there is an increment for the taxable year, the ratio of the total current-year cost of the pool to the total base-year cost of the pool must be computed. This ratio when multiplied by the amount of the increment measured in terms of base-year cost gives the LIFO

value of such increment.

The regulations also include examples as to how LIFO inventories should be computed under the double-extension method. There are no examples or other regulations that relate specifically to the use of the index or link-chain methods.

Even though the regulations do not specifically address the link-chain or index methods, it is commonly agreed that those methods are conceptually comparable to the double-extension method. See, e.g. Leslie J. Schneider, Federal Income Taxation of Inventories, Sec. 14.02[3] (1995). Except for the sampling techniques used in both the link-chain and the index methods and the use of a cumulative index in the link-chain method, the principles, concepts, and operating rules in the double-extension regulations are conceptually applicable to taxpayers on the index or link-chain methods. The double-extension regulations are cited frequently to justify various methods and approaches used in conjunction with the link-chain method. For example, Treas. Reg. Sec. 1.472-8(e)(2)(iv), which describes the rules for determining layer increments and decrements, has been applied to the link-chain method.

This regulation was cited as the authority to reject the methodology used by an examining agent to compute the base cost of inventories of a taxpayer changing from the index method to the link-chain method. Another example is the option available to link-chain taxpayers to use the earliest, latest, or average current cost to value LIFO layers. See, Treas. Reg. Sec. 1.472-8(e)(2)(ii) (double-extension regulations).

DISCUSSION

The Service has allowed a taxpayer on the link-chain method to use dual indexes to value the LIFO inventory. The first index is computed by double-extending end of year quantities at most recent purchase costs and at the costs in effect at the beginning of the year. This index measures the inflation for the year. A second index was used to value any increment in the current year.

The second index is computed by extending a representative portion of the ending inventory quantities at the beginning of year costs and at the earliest acquisition cost. It is important to note that the taxpayer used actual earliest acquisition prices to develop the increment valuation index.

One noted inventory expert discusses the fact that the dual index method can produce correct results. (See, Schneider, supra at 14-97.) He warns, however, that the earliest acquisition costs would not reflect the costs incurred by the taxpayer on any particular date, such as the first day or the last day of the first quarter of the taxpayer's year. Instead, such costs must be computed by determining the quantity of each particular

type of item which is contained in the taxpayer's ending inventory and by comparing a sufficient number of the same items purchased or produced by the taxpayer during the year, commencing with the first day of the year and working forward until the number of units which are priced equals the quantity of such items in the taxpayer's ending inventory.

If properly applied, the use of a two index method or dual indexes should result in an inventory valuation method that is substantially the same as if the ending inventory was double- extended on an item by item basis in the order of acquisitions. In other words, the standard must be the use of a single overall index. Verification of the result must be satisfactorily demonstrated by the taxpayer to the District Director. Treas. Reg. Sec. 1.472-8(e)(1).

However, the utility to the taxpayer in using a dual index is generally predicated upon a shortcut application of this method. One common shortcut method is to use the prior year's cumulative index to value the layer; in other words, the ratio of the prior-year cost of the pool to the total base-year cost of the pool. This method assumes there is no inflation whatsoever in the current layer. In most situations, such an assumption is unrealistic. Moreover, this method is in direct violation of Treas. Reg. Sec. 1.472-8(e)(2)(iv) which requires that increments be valued using the ratio of the total current-year cost of the pool to total base-year cost of the pool.

This method, rather than valuing the increment at current-year costs, actually values it at prior-year costs. The method violates the LIFO election to use the earliest acquisition costs and it does not clearly reflect income.

The so-called inventory turn method is another common shortcut method used to determine the earliest acquisition index. Under this method, if the inventory turned twelve times a year, the operative portion of the index would be divided by twelve. For example, if the current index was 1.12, the operative portion would be .12 (1.12 minus 1). This method would then assume the secondary index was 1.01 (.12 divided by 12 equals .01 and 1. plus .01 equals 1.01).

One potential distortion is based on the fact that the inventory turn method assumes a constant rate of inflation throughout the year. If inflation does not occur at a constant rate, the inventory turn method will not produce the same result which the earliest acquisition method described in Treas. Reg. Sec. 1.472-8(e)(2)(ii)(b) would produce.

The distortion is not limited to understatement of the index. The method could similarly result in a large overstatement of the index. This is because the amount and severity of the distortion is dependent upon the actual rate of inflation throughout the year compared to an assumed constant rate. It would be quite rare, though, for the distortion to be zero, indicating actual inflation was at a precisely constant rate

throughout the time period of the first purchases of a sufficient quantity of each item to equal the quantity in the year end inventory.

Another potential distortion in the inventory turn method involves new items in the inventory. One of the reasons taxpayers elect the link-chain method is because they have a significant number of new items entering the inventory every year. The inventory turn method assumes that items are purchased at a constant rate and mix throughout the year.

Most new items would be purchased (or produced) after the first inventory turn. If new items make up a material portion of the overall inventory, and the new items are not considered in the computation of the layer valuation index, that index will be understated during periods of inflation. New items must be included in the computation of the LIFO indexes.

CONCLUSION

A taxpayer electing the earliest acquisitions cost method of determining the current year cost of items making up a pool may not:

1. Use a prior year's cumulative index in determining current year cost (earliest acquisitions).

2. Use an inventory turn, shortcut approach unless the taxpayer can demonstrate to the satisfaction of the District Director that its method consistently results in the clear reflection of its income. Some factors that may support clear reflection are (1) the inflation rate is substantially the same throughout the year, and (2) the items are purchased or produced at a substantially constant rate and mix throughout the year. The combined variances in (1) and (2) above manifestly support an assumption that the application of the shortcut method produces substantially the same results as if the taxpayer had double-extended each item at current year and base year cost (in the case of taxpayers using the double extension method) or current year and prior year cost (in thecase of taxpayers using the link chain method).